UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF COMMERCIAL FISHERIES

CALIFORNIA FISHERY MARKET NEWS MONTHLY SUMMARY

APRIL 1969

PART II–Fishing Information*

Sea-surface temperatures, fishing and research information of interest to the West Coast tuna-fishing industry and marine scientists

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U. S. Department of the Interior
Bureau of Commercial Fisheries
Fishery-Oceanography Center
P. O. Box 271
La Jolla, California 92037

*Part 1 - "Fishery Products Production and Market Data" is issued by the Bureau of Commercial Fisheries, Market News Service, U.S. Custom House, Terminal Island, California

SEA SURFACE TEMPERATURE CHARTS, EASTERN PACIFIC OCEAN
APRIL 1969

Acknowledgements

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U.S. Weather Bureau, San Diego, California
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Van Comp Sea Food Company, Division of Ralston Purina Company, Terminal Island, California
Fishing Vessels; MARTINAC, SAN JUAN, WESTPORT

Charts

Figure 1.--Mean sea surface temperatures (° F) derived from approximately 8000 observations. Squares show temperatures at weather ship stations. Numerals on shore are temperatures at coastal and lightship stations.

Figure 2.--Deviation of sea surface temperatures (° F) from long term charts of H. O. 225. Hatched areas are colder in 1969.

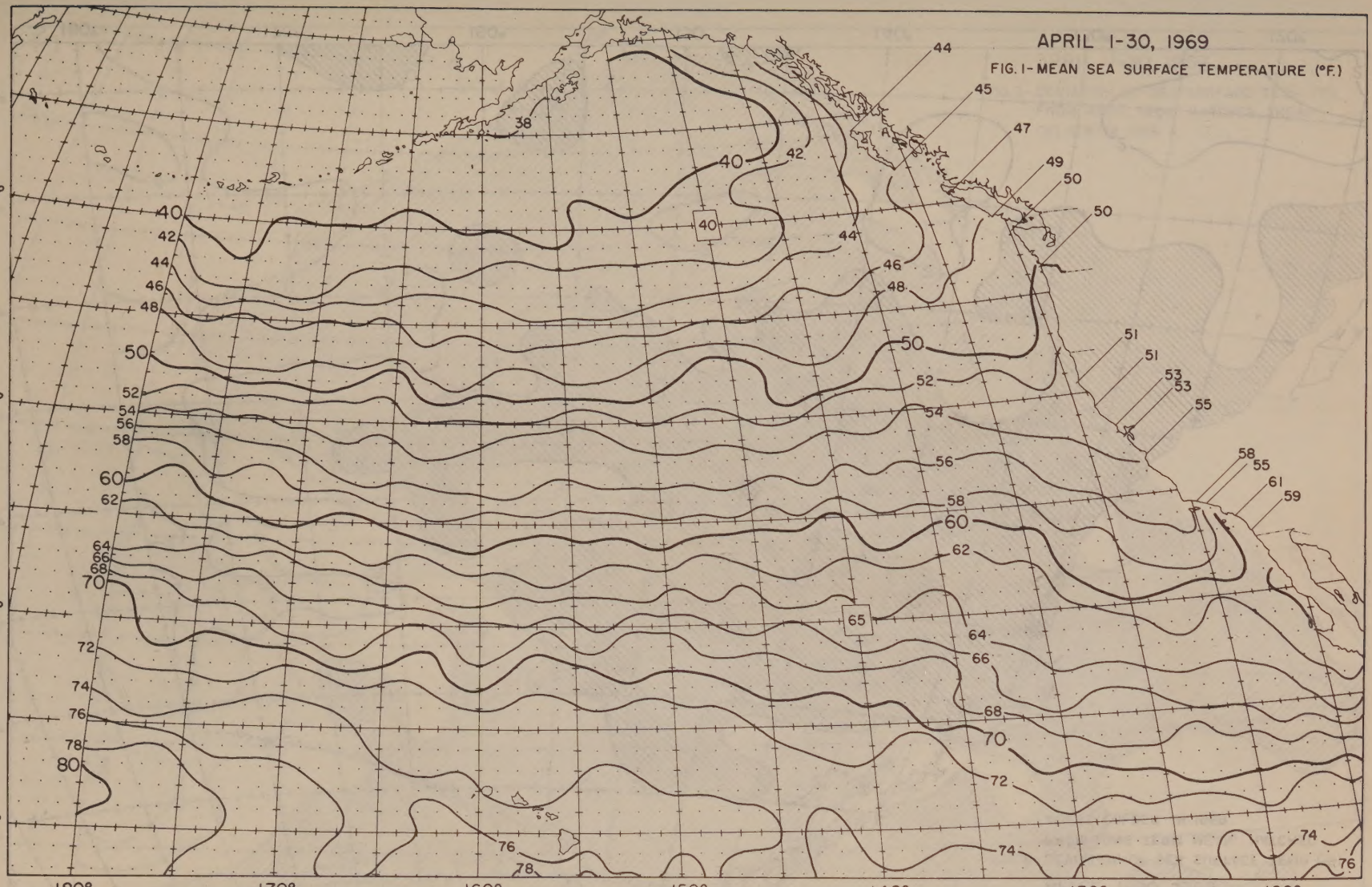
Figure 3.--Deviation of sea surface temperatures (° F) from those of April 1968. Hatched areas are colder in 1969.

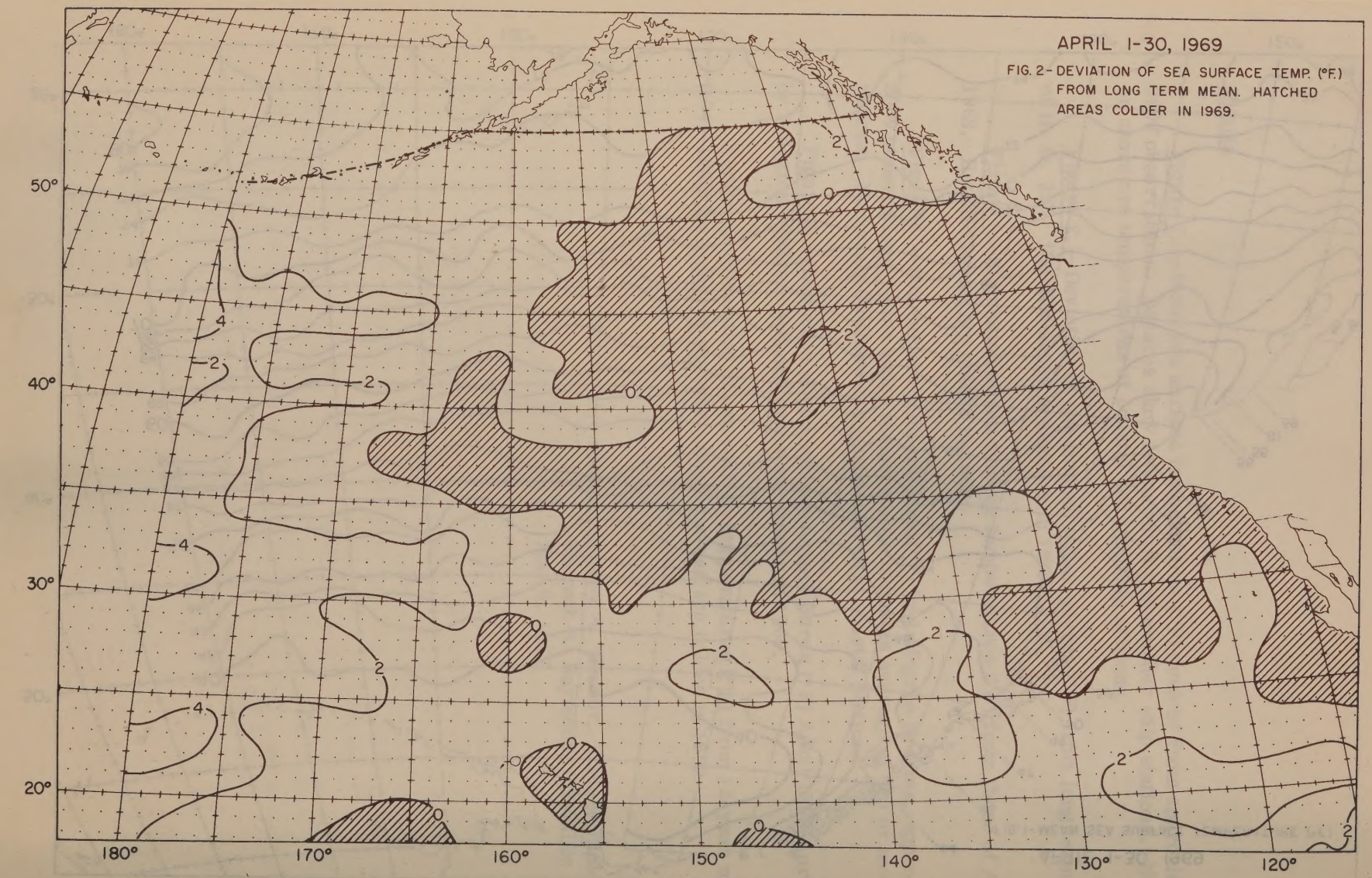
Figure 4.--Sea surface temperatures (° F) by 1-degree squares, approximately 2000 observations. Line under temperatures indicates average of two or more observations. Numerals on shore are temperatures at coastal stations.

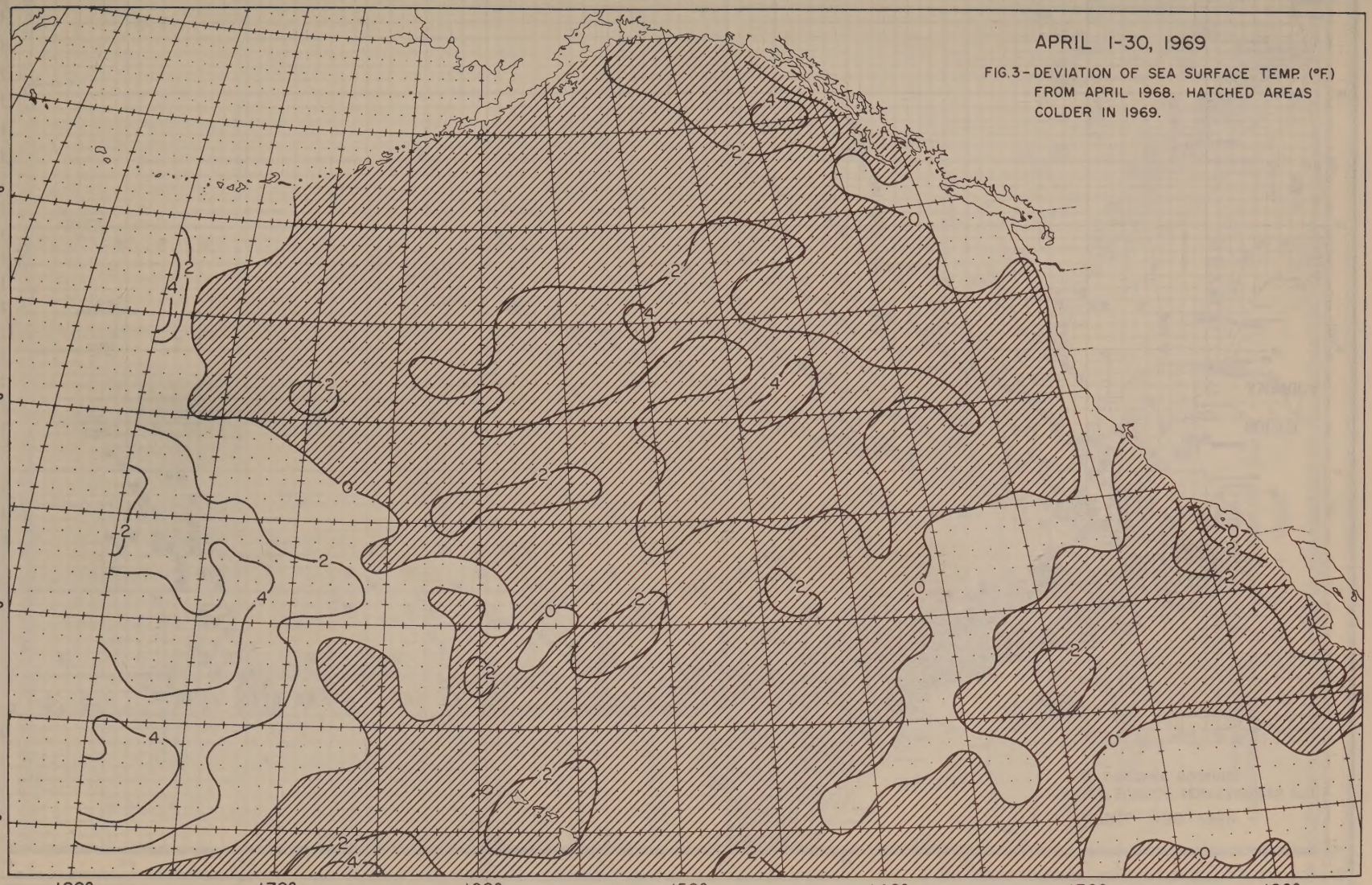
Figure 5.--Deviation of sea surface temperatures (° F) April 1969-April 1968 by 1-degree squares. Shaded areas are colder in 1969.

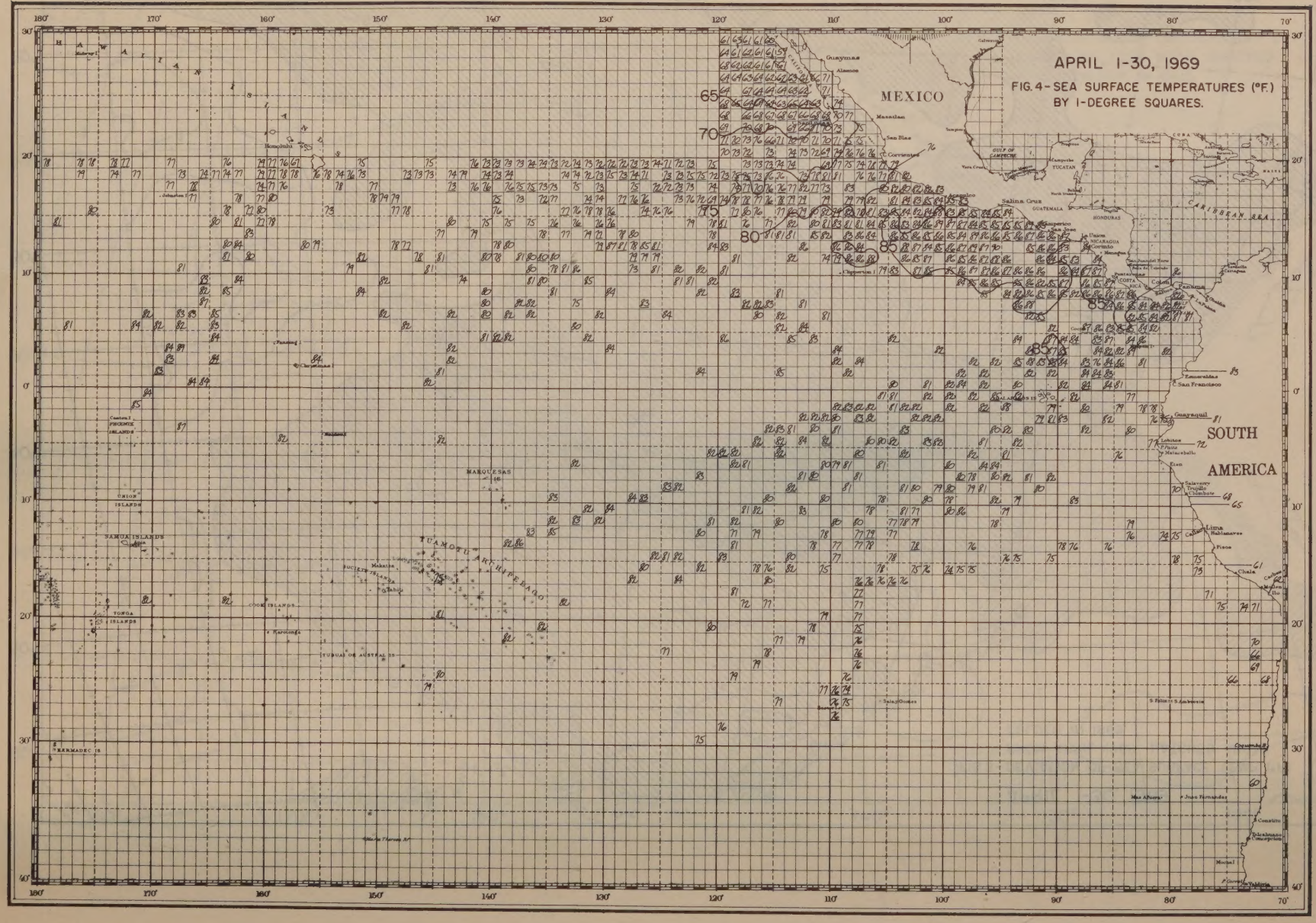
Figure 6.--Deviation of sea surface temperatures (° F) from 12-year mean (1947-1958) by 2-degree squares. Shaded areas are colder in 1969.

James A. Renner, Fishery Biologist
Kenneth S. Raymond, Scientific Illustrator
May 8, 1969


APRIL 1-30, 1969
FIG. 1- MEAN SEA SURFACE TEMPERATURE (°F.)
50°
40°
30°
20°
180°
170°
160°
150°
140°
130°
120°


APRIL 1-30, 1969
FIG. 2- DEVIATION OF SEA SURFACE TEMP. (°F.) FROM LONG TERM MEAN. HATCHED AREAS COLDER IN 1969.
50°
40°
30°
20°
180°
170°
160°
150°
140°
130°
120°
4
2
0
-2
-4


APRIL 1-30, 1969
FIG.3- DEVIATION OF SEA SURFACE TEMP. (°F.) FROM APRIL 1968. HATCHED AREAS COLDER IN 1969.
50°
40°
30°
20°
180°
170°
160°
150°
140°
130°
120°


APRIL 1-30, 1969
FIG. 4 - SEA SURFACE TEMPERATURES (°F.)
BY 1-DEGREE SQUARES.
MEXICO
SOUTH
AMERICA
CARIBBEAN SEA
HONDURAS
GUATEMALA
COSTA RICA
NICARAGUA
Salina Cruz
Guaymas
Alamos
Mazatlan
San Blas
C. Corrientes
Manzanillo
Acapulco
Puerto Angel
Tapachula
Corinto
Panama
Esmeraldas
C. San Francisco
Guayaquil
Salaverry
Trujillo
Chimbote
Lima
Callao
Pisco
Chala
Iquique
Antofagasta
Coquimbo
Valparaiso
Juan Fernandez
Mas A Fuera
Mas A Tierra
Galapagos Is.
Cocos I.
Malpelo I.
Gorgona I.
Tumaco
Buenaventura
Cabo Marzo
Quibdo
Cartagena
Barranquilla
Maracaibo
Puerto Cabello
La Guaira
Curacao
Aruba
Trinidad
Tobago
Grenada
Barbados
St. Lucia
Martinique
Guadeloupe
Montserrat
Antigua
St. Kitts
Nevis
Virgin Is.
St. Croix
St. Thomas
Puerto Rico
Jamaica
Cuba
Haiti
Dominican Rep.
Bahamas
Key West
Galveston
Tampico
Veracruz
Campeche
Yucatan
Progreso
Belize
Merida
Isthmus of Tehuantepec
Gulf of Mexico
Gulf of Campeche
Caribbean Sea
Honolulu
Johnston I.
Palmyra I.
Christmas I.
Fanning I.
Canton I.
Phoenix Islands
Union Islands
Samoa Islands
Tonga Islands
Cook Islands
Tuamotu Archipelago
Tahiti
Papeete
Rapa
Tubuai or Austral Is.
Marquesas
Easter I.
Sala y Gomez
Nazca
Juan Fernandez
Kermadec Is.
Auckland Is.
Macquarie I.
Balleny Is.
Scott I.
Ross Sea
Balleny Is.
Peter I. I.
Alexander I.
Graham Land
Weddell Sea
Antarctic Peninsula
Palmer Archipelago
South Orkney Is.
South Shetland Is.
South Sandwich Is.
South Georgia
Bouvet I.
Prince Edward Is.
Crozet Is.
Kerguelen I.
Heard I.
McDonald Is.
Amsterdam I.
St. Paul I.
Tristan da Cunha
Gough I.
Inaccessible I.
Nightingale I.
Falkland Is.
Staten I.
Tierra del Fuego
Cape Horn
Strait of Magellan
Punta Arenas
Puerto Montt
Concepcion
Valparaiso
Juan Fernandez
Mas A Fuera
Mas A Tierra
Galapagos Is.
Cocos I.
Malpelo I.
Gorgona I.
Tumaco
Buenaventura
Cabo Marzo
Quibdo
Cartagena
Barranquilla
Maracaibo
Puerto Cabello
La Guaira
Curacao
Aruba
Trinidad
Tobago
Grenada
Barbados
St. Lucia
Martinique
Guadeloupe
Montserrat
Antigua
St. Kitts
Nevis
Virgin Is.
St. Croix
St. Thomas
Puerto Rico
Jamaica
Cuba
Haiti
Dominican Rep.
Bahamas
Key West
Galveston
Tampico
Veracruz
Campeche
Yucatan
Progreso
Belize
Merida
Isthmus of Tehuantepec
Gulf of Mexico
Gulf of Campeche
Caribbean Sea
Honolulu
Johnston I.
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Phoenix Islands
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Tuamotu Archipelago
Tahiti
Papeete
Rapa
Tubuai or Austral Is.
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Easter I.
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Ross Sea
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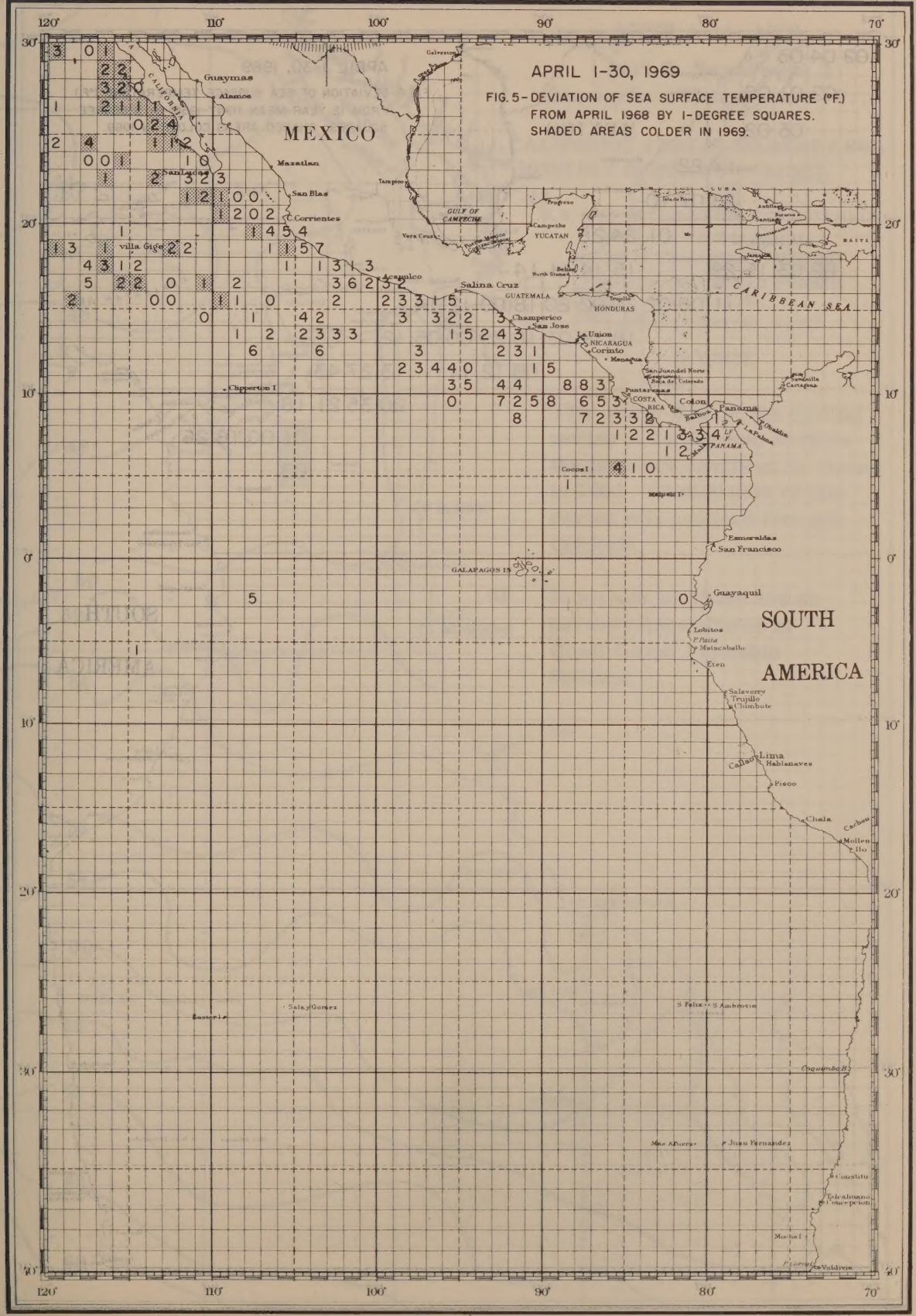
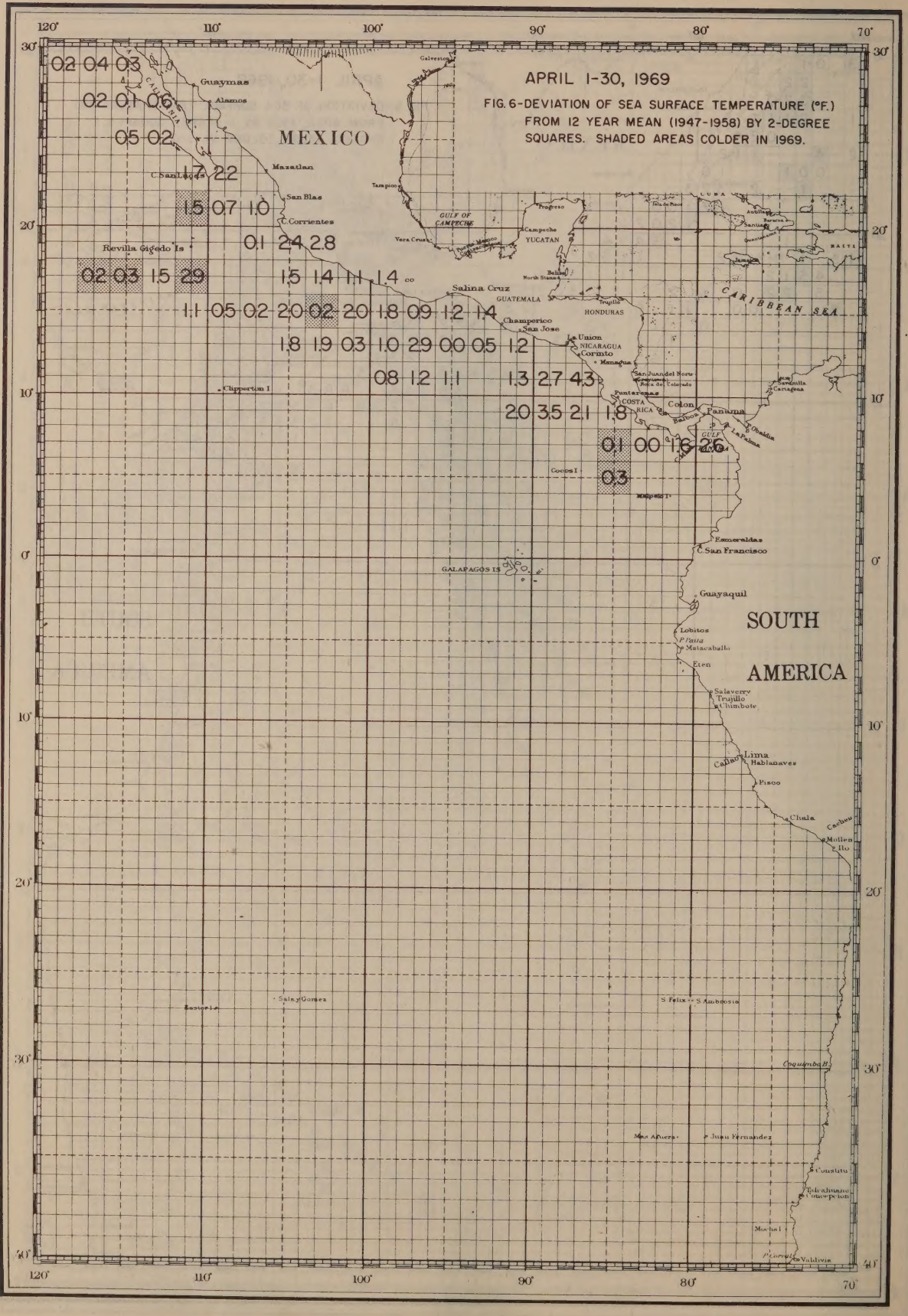
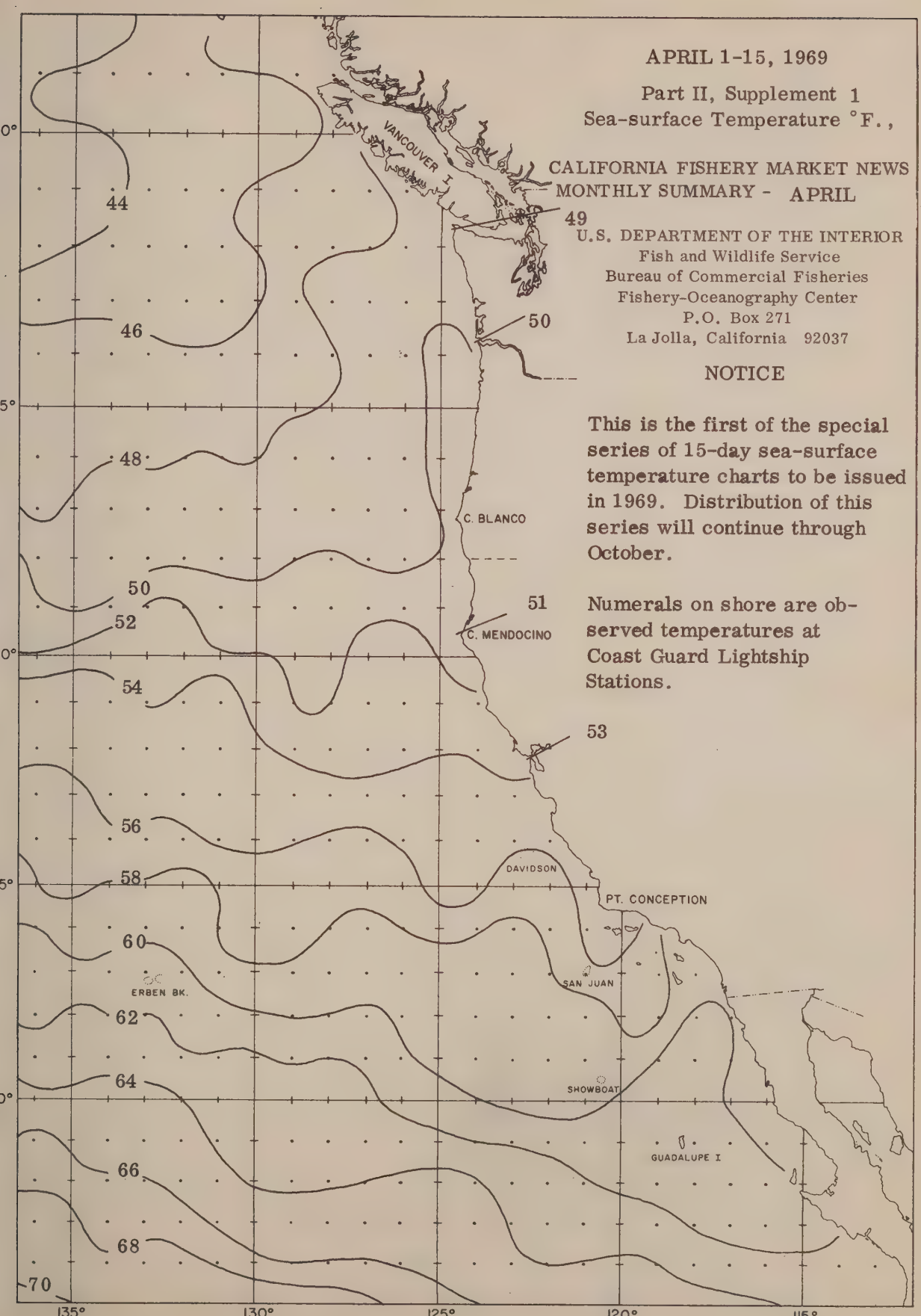
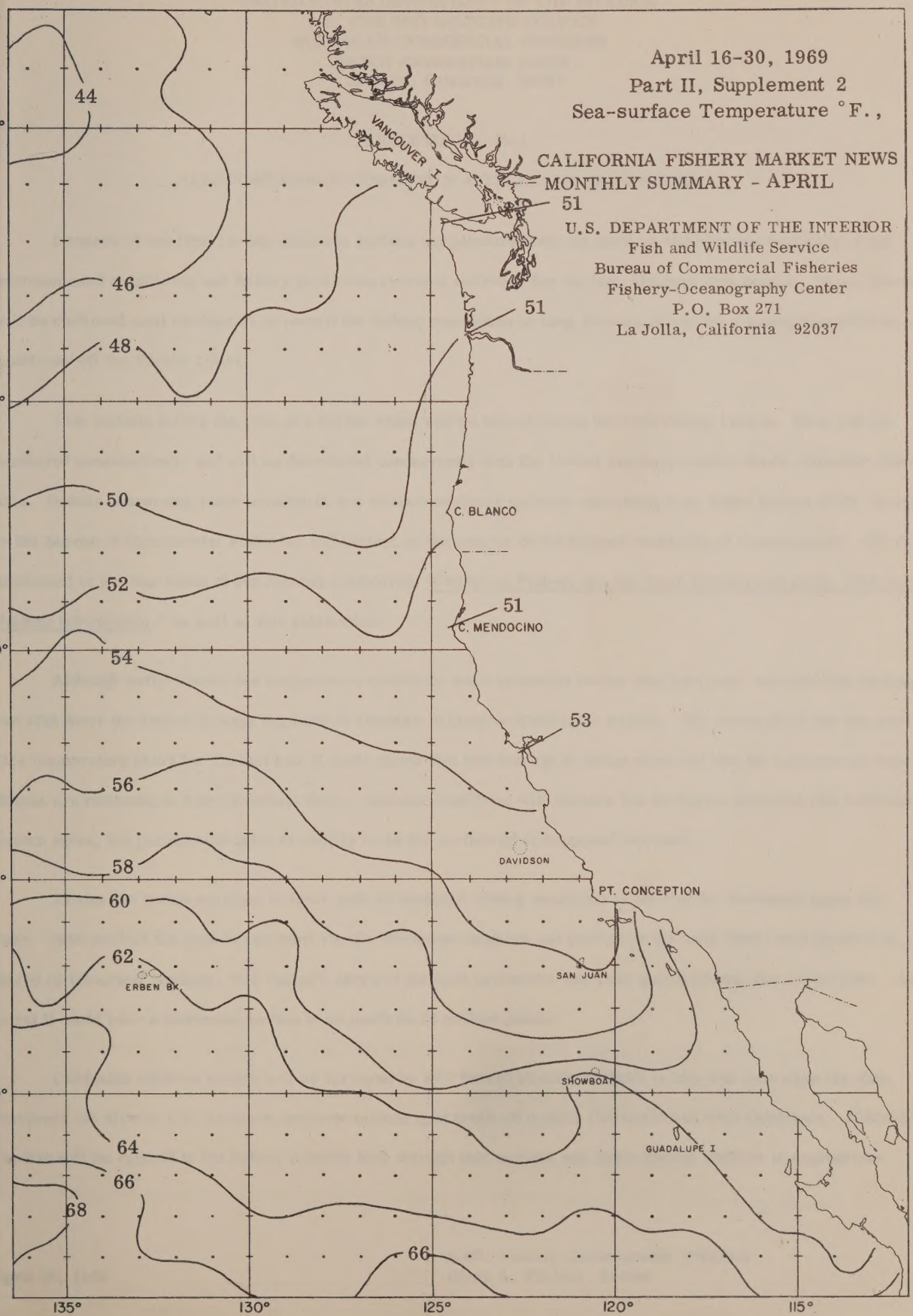
South Sandwich Is.
South Georgia
Bouvet I.
Prince Edward Is.
Crozet Is.
Kerguelen I.
Heard I.
McDonald Is.
Amsterdam I.
St. Paul I.
Tristan da Cunha
Gough I.
Inaccessible I.
Nightingale I.
Falkland Is.
Staten I.
Tierra del Fuego
Cape Horn
Strait of Magellan
Punta Arenas
Puerto Montt
Concepcion
Valparaiso


APRIL 1-30, 1969
FIG. 5 - DEVIATION OF SEA SURFACE TEMPERATURE (°F.) FROM APRIL 1968 BY 1-DEGREE SQUARES. SHADED AREAS COLDER IN 1969.
MEXICO
SOUTH AMERICA
CARIBBEAN SEA
GULF OF CALIFORNIA
GULF OF CAMPECHE
YUCATAN
GUATEMALA
HONDURAS
NICARAGUA
COSTA RICA
PANAMA
CUBA
HAITI
JAMAICA
Guaymas
Alamos
Mazatlan
San Blas
C. Corrientes
Acapulco
Salina Cruz
Champerico
San Jose
La Union
Corinto
Managua
Chipperton I
Cocos I
GALAPAGOS IS
Esmeraldas
C. San Francisco
Guayaquil
Lobitos
Eten
Salaverry
Trujillo
Chimbote
Lima
Callao
Hablanaves
Pisco
Chala
Cachau
Salas y Gomez
S. Felix
S. Ambrosio
Choumbali
Mas A Fuera
Juan Fernandez
Constitu
Talcahuano
Concepcion
Valdivia
Tampico
Vera Cruz
Campeche
Progreso
Belize
Trujillo
Panama
Colon
Balboa
Obaldia
La Palma
Esmeraldas
Tela de Pinos
Santiago
Jamaica
Tampico
Galveston


APRIL 1-30, 1969
FIG. 6-DEVIATION OF SEA SURFACE TEMPERATURE (°F.) FROM 12 YEAR MEAN (1947-1958) BY 2-DEGREE SQUARES. SHADED AREAS COLDER IN 1969.
MEXICO
SOUTH AMERICA
CARIBBEAN SEA
GULF OF CAMPECHE
GALAPAGOS IS
Guaymas
Alamos
Mazatlan
San Blas
Corrientes
Salina Cruz
Champerico
San Jose
La Union
Corinto
Managua
Punta Arenas
Colon
Panama
Esmeraldas
C. San Francisco
Guayaquil
Lobitos
Talara
Matacaballo
Eten
Salaverry
Trujillo
Chimbote
Lima
Callao
Hablanaves
Pisco
Chala
Cachau
Mollendo
Ilo
Arica
Iquique
Coquimbo
Mas Afuera
Juan Fernandez
Constitucion
Talcahuano
Concepcion
Valdivia
Corral
Mocha I.
Clipperton I.
Cocos I.
Revilla Gigedo Is
Tampico
Galveston
Progreso
Campeche
YUCATAN
Vera Cruz
Belize
Trujillo
HONDURAS
GUATEMALA
COSTA RICA
Bocas
Chagres
Portobello
Cartagena
Barranquilla
Santa Marta
Jamaica
CUBA
HAITI
Sala y Gomez
Easter I.
S. Felix
S. Ambrosio
120°
110°
100°
90°
80°
70°
30°
20°
10°
0°


APRIL 1-15, 1969
Part II, Supplement 1
Sea-surface Temperature °F.,
CALIFORNIA FISHERY MARKET NEWS
MONTHLY SUMMARY - APRIL
U.S. DEPARTMENT OF THE INTERIOR
Fish and Wildlife Service
Bureau of Commercial Fisheries
Fishery-Oceanography Center
P.O. Box 271
La Jolla, California 92037
NOTICE
This is the first of the special series of 15-day sea-surface temperature charts to be issued in 1969. Distribution of this series will continue through October.
Numerals on shore are observed temperatures at Coast Guard Lightship Stations.
VANCOUVER I.
C. BLANCO
C. MENDOCINO
DAVIDSON
PT. CONCEPTION
SAN JUAN
ERBEN BK.
SHOWBOAT
GUADALUPE I
44
46
48
50
52
54
56
58
60
62
64
66
68
70
49
50
51
53
135°
130°
125°
120°
115°


April 16-30, 1969
Part II, Supplement 2
Sea-surface Temperature °F.,
CALIFORNIA FISHERY MARKET NEWS
MONTHLY SUMMARY - APRIL
U.S. DEPARTMENT OF THE INTERIOR
Fish and Wildlife Service
Bureau of Commercial Fisheries
Fishery-Oceanography Center
P.O. Box 271
La Jolla, California 92037
VANCOUVER I.
C. BLANCO
C. MENDOCINO
DAVIDSON
PT. CONCEPTION
SAN JUAN
ERBEN BK.
SHOWBOAT
GUADALUPE I
44
46
48
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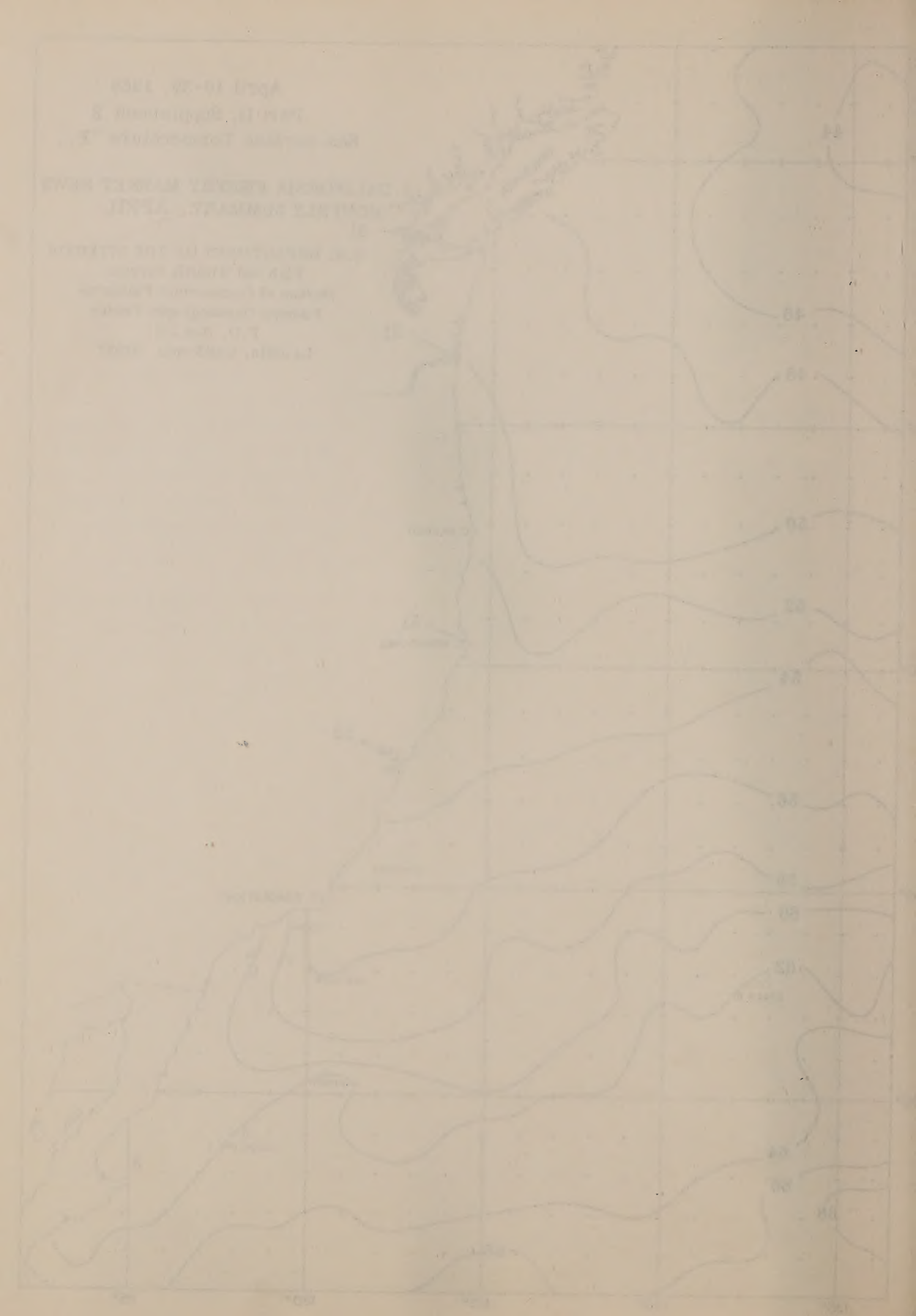
51
51
53
66
135°
130°
125°
120°
115°



UNITED STATES DEPARTMENT OF THE INTERIOR
U.S. FISH AND WILDLIFE SERVICE
BUREAU OF COMMERCIAL FISHERIES
Fishery-Oceanography Center
La Jolla, California 92037

BULLETIN NO. 69-1

ALBACORE FISHING COMMUNITY ASTIR AS 1969 SEASON NEARS

Issuance of our first 15-day mean sea surface temperature chart on April 15 signalled the beginning of our environmental monitoring and fishery prediction services activities for the 1969 albacore tuna season. These charts will be continued until October 31 to permit the fishing community to keep abreast of rapidly-changing temperature conditions off the Pacific Coast.

This bulletin marks the first of a series which will be issued during the 1969 fishing season. Each will be numbered consecutively, and will be distributed concurrently with the 15-day sea temperature charts whenever practicable. Details concerning radio broadcasts and weather advisory services emanating from Radio Station WWD, licensed to the Bureau of Commercial Fisheries and located on the campus of the Scripps Institution of Oceanography, will be announced in the May issue of our monthly publication "California Fishery Market News Monthly Summary, Part II--Fishing Information," as well as this publication.

Although early-season sea temperature conditions were somewhat cooler than last year, summertime heating can still favor the return of large numbers of albacore to Oregon-Washington waters. The enclosed 15-day sea surface temperature chart for the last half of April shows that this heating is taking place and that the temperature conditions are returning to a more normal state. Summer conditions will advance the 60-degree isotherm into northwest waters again, but perhaps not quite as rapidly or as far northward as happened last year.

Production trends continue to favor good to excellent fishing conditions in the Pacific Northwest again this year. 1968 marked the peak in recorded Pacific Northwest landings and percent of the total West Coast production. Based on historical landings, this region's share of the total production this year may approach that of last year. At worst it could have a maximum decline of as much as 18 million pounds.

California offshore waters will be surveyed by R/V DAVID STARR JORDAN in May and June when the ship traverses the Marine Life Research anchovy-sardine grid track off central California and Baja California. JORDAN'S reports will be relayed to the fishing industry both through this medium and Radio Station WWD as is appropriate.

April 30, 1969

Staff, Fishery-Oceanography Program
Glenn A. Flittner, Leader